

- 2 -

LISTING OF THE CLAIMS:

This listing of claims will replace prior versions and listings of claims in the application:

Claims 4 and 24 have been amended as follows: Underlines indicate insertions and ~~strikeouts~~ indicate deletions.

Claims 1-3: cancelled.

4. (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:
- (a) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 1 to 577 of SEQ ID NO:2;
 - (b) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
 - (c) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 577 of SEQ ID NO:2;
 - (d) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 496 of SEQ ID NO:4;
 - (e) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:8;
 - (f) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 487 of SEQ ID NO:8;
 - (g) a polynucleotide sequence fully complementary to any of the polynucleotide sequences encoding a Staufen polypeptide in (a), (b), (c), (d), (e), or (f);
 - (h) a polynucleotide sequence at least 95% identical to any of the polynucleotide sequences in (a), (b), (c), (d), (e), or (f), wherein said Staufen polypeptide interacts with at least one interacting partner selected from the group consisting of:
 - i. RNA
 - i. ~~HIV genomic~~ TAR RNA;
 - ii. bicoid RNA;
 - iii. Poly(rI)-Poly(rC); and

- 3 -

- iv. tubulin; and
- (i) a polynucleotide sequence which hybridizes under high stringency conditions any of the polynucleotide sequences in (a), (b), (c), (d), (e), (f), or (h), wherein said nucleotide sequence encodes a Staufén polypeptide which interacts with at least one interacting partner selected from the group consisting of:

- i. RNA
- i. ~~HIV-genomic-TAR RNA~~;
- ii. b/cold RNA;
- iii. Poly(rI)-Poly(rC); and
- iv. tubulin;

and wherein said high stringency conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA; and

- ~~(j) a polynucleotide sequence which hybridizes under high stringency conditions to any of the polynucleotide sequences as set forth in SEQ ID NOs 1, 3, 5, 6 and 7; wherein said nucleic acid sequence does not hybridize to nucleotides 3073-3435 of SEQ ID NO:1, nucleotides 2784-3184 of SEQ ID NO:3, nucleotides 2709-3085 of SEQ ID NO:5, nucleotides 2914-3086 of SEQ ID NO:6, or nucleotides 2248-2270 of SEQ ID NO:7; and wherein said high stringency conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA.~~

5. (Original) A recombinant vector comprising said isolated nucleic acid molecule of claim 4.
6. (Original) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 5 into a host cell.
7. (Original) A recombinant host cell produced by the method of claim 6.

- 4 -

8. (Previously presented) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 7 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.

Claims 9-23: cancelled.

24. (Currently amended) An isolated nucleic acid molecule, comprising a polynucleotide sequence which encodes a Staufen polypeptide sequence, said polynucleotide sequence being selected from the group consisting of:
- (b) SEQ ID NO:5;
 - (c) SEQ ID NO:3;
 - (d) SEQ ID NO:1;
 - (e) SEQ ID NO:6;
 - (f) SEQ ID NO:7;
 - (g) a polynucleotide sequence fully complementary to any of the nucleotide sequence encoding a Staufen polypeptide in (a), (b), (c), (d), or (e); and
 - (h) a polynucleotide sequence at least 95% identical to any of the nucleotide sequences in (a), (b), (c), (d), or (e), wherein said Staufen polypeptide encoded by said polynucleotide sequence interacts with at least one interacting partner selected from the group consisting of:
 - ~~i. RNA~~
 - i. ~~HIV-genomic-TAR RNA~~;
 - ii. bicoid RNA;
 - iii. Poly(rI)-Poly(rC); and
 - iv. tubulin; and
 - (i) a polynucleotide sequence which hybridizes under high stringency conditions to any of the polynucleotide sequences in (a), (b), (c), (d), (e), (f), or (g), wherein said Staufen polypeptide encoded by said polynucleotide sequence, interacts with at least one interacting partner selected from the group consisting of:
 - ~~i. RNA~~
 - i. ~~HIV-genomic-TAR RNA~~;

- 5 -

- iii. bicoid RNA;
- iv. Poly(rI)-Poly(rC); and
- v. tubulin;

and wherein said high stringency conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA.

25. (Cancelled) An isolated nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:
- (a) a polynucleotide sequence encoding a Staufén polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
 - (b) a polynucleotide sequence encoding a Staufén polypeptide comprising the sequence of amino acids of SEQ ID NO:2;
 - (c) a polynucleotide sequence encoding a Staufén polypeptide comprising amino acids 2 to 577 of SEQ ID NO:2; and
 - (d) a polynucleotide sequence encoding a Staufén polypeptide and conservative substitutions of the polypeptides encoded by any of the sequences in (a), (b) or (c).
26. (Previously presented) A recombinant vector comprising said isolated nucleic acid molecule of claim 24.
27. (Previously presented) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 26 into a host cell.
28. (Previously presented) A recombinant host cell produced by the method of claim 27.
29. (Previously presented) A recombinant method for producing a Staufén polypeptide, comprising culturing said host cell of claim 28 under conditions such that said polypeptide is expressed and recovering said Staufén polypeptide.

- 6 -

30. (Previously presented) An isolated nucleic acid molecule, comprising a polynucleotide sequence which encodes a Staufén polypeptide sequence, said polynucleotide sequence being selected from the group consisting of:
- (a) SEQ ID NO:5;
 - (b) SEQ ID NO:3;
 - (c) SEQ ID NO:1;
 - (d) SEQ ID NO:6;
 - (e) SEQ ID NO:7; and
 - (f) a nucleotide sequence fully complementary to any of the nucleotide sequence encoding a Staufén polypeptide in (a), (b), (c), (d), or (e).
31. (Previously presented) The isolated nucleic acid molecule of claim 30, wherein said polynucleotide sequence is selected from the group consisting of:
- (a) a polynucleotide sequence encoding a Staufén polypeptide comprising amino acids from 1 to 577 of SEQ ID NO:2;
 - (b) a polynucleotide sequence encoding a Staufén polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
 - (c) a polynucleotide sequence encoding a Staufén polypeptide comprising amino acids from 2 to 577 of SEQ ID NO:2;
 - (d) a polynucleotide sequence encoding a Staufén polypeptide comprising amino acids from 2 to 496 of SEQ ID NO:4;
 - (e) a polynucleotide sequence encoding a Staufén polypeptide comprising the sequence of amino acids of SEQ ID NO:8;
 - (f) a polynucleotide sequence encoding a Staufén polypeptide comprising amino acids from 2 to 487 of SEQ ID NO:4;
 - (g) a polynucleotide sequence fully complementary to any of the polynucleotide sequence encoding a Staufén polypeptide in (a), (b), (c), (d), (e), or (f).
32. (Previously presented) A recombinant vector comprising said isolated nucleic acid molecule of claim 31.
33. (Previously presented) A method of making a recombinant host cell comprising

- 7 -

introducing the recombinant vector of claim 32 into a host cell.

34. (Previously presented) A recombinant host cell produced by the method of claim 33.
35. (Previously presented) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 34 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.
36. (Previously presented) A recombinant vector comprising said isolated nucleic acid molecule of claim 30.
37. (Previously presented) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 36 into a host cell.
38. (Previously presented) A recombinant host cell produced by the method of claim 37.
39. (Previously presented) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 38 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.
40. (Currently presented) A host cell comprising the recombinant vector of claim 5.
41. (Currently presented) A host cell comprising the recombinant vector of claim 26.
42. (Currently presented) A host cell comprising the recombinant vector of claim 32.

- 8 -

43. (Currently presented) A host cell comprising the recombinant vector of claim
36.